

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Shunpei Yamazaki et al.                      Art Unit : Unknown  
Serial No. : Not yet assigned                              Examiner : Unknown  
Filed : May 9, 2001  
Title : USER IDENTITY AUTHENTICATION SYSTEM AND USER IDENTITY  
AUTHENTICATION METHOD AND MOBILE TELEPHONE DEVICE

Commissioner for Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Prior to examination, please amend the application as follows:

In the claims:

Amend claims 2, 4, 7, 11, 15-20, 22, 26, 27, 29, 34-37, and 39 as follows:

2. A user identity authentication system according to claim 1, wherein the image sensor is constructed of photo diodes provided for respective pixels.

4. A user identity authentication system according to claim 3, wherein the module for comparing is configured for judging whether the user can be identified or not by comparing individual information read by said image sensor with individual information stored in said storage device.

7. A user identity authentication system according to claim 2, wherein said mobile information communication device comprises an operation key and is configured to provide an operation of authenticating the user's identity by manipulating the operation key.

11. A user identity authentication system according to claim 4, wherein said mobile information communication device comprises an operation key and is configured to provide an operation of authenticating the user's identity by manipulating the operation key.

15. A user identity authentication system according to claim 2, wherein said mobile information communication device comprises a power source and is configured to provide authentication of said user's identity simultaneously with switching on the power source of said mobile information communication device.

16. A user identity authentication system according to claim 4, wherein said mobile information communication device comprises a power source and is configured to provide authentication of said user's identity simultaneously with switching on the power source of said mobile information communication device.

17. A user identity authentication system according to claim 2, wherein one or both of a palm print (palm lines) and/or a fingerprint comprises said individual information.

18. A user identity authentication system according to claim 4, wherein one or both of a palm print (palm lines) and/or a fingerprint comprises said individual information.

19. A user identity authentication system according to claim 2, wherein said individual information comprises one or both of a palm print of a whole palm or a part of a palm.

20. A user identity authentication system according to claim 4, wherein said individual information comprises one or both of a palm print of a whole palm or a part of a palm.

22. A user identity authentication system of claim 21, wherein said individual information is transmitted via the Internet only when necessary, in accordance with a

transmission necessity judged based on a degree of requirement set in said mobile information communication device or a destination terminal of communication.

26. A user identity authentication method using a mobile information communication device provided with a liquid crystal display device comprising a built-in image sensor, said method comprising:

- a step of reading individual information of a user with said image sensor; and
- a step of authenticating a user's identity based on said individual information.

27. A user identity authentication method according to claim 26 wherein the image sensor comprises photo diodes provided for respective pixels.

29. A user identity authentication method according to claim 27, further comprising authenticating the user's identity by manipulating an operation key on said mobile information communication device.

34. A user identity authentication method according to claim 27, wherein one or both of a palm print (palm lines) and/or a fingerprint comprises said individual information.

35. A user identity authentication method according to claim 27, wherein said individual information comprises one or both of a palm print of a whole palm or a part of a palm.

36. A user identity authentication method using a mobile information communication device provided with a liquid crystal display device comprising a built-in image sensor, said method comprising:

- a step of reading individual information of a user with said image sensor; and
- a step of transmitting said individual information via the Internet.

37. A user identity authentication method according to claim 36 further comprising a step of judging whether or not said individual information needs to be transmitted in accordance with a degree of requirement set in said mobile information communication device or a destination terminal of communication; and transmitting said individual information via the Internet only when necessary.

39. A mobile telephonic device comprising:  
a liquid crystal display device; and  
a flash memory,  
wherein said liquid crystal device comprises photo diodes provided for respective pixels, and  
wherein said flash memory is stored with individual information of a user.

REMARKS

Claim 1-41 are pending with claims 1, 3, 21, 23, 26, 39, and 40 being independent.  
Claims 2, 4, 7, 11, 15-20, 22, 26, 27, 29, 34-37, and 39 have been amended to put the application in better condition for examination.

Attached is a marked-up version of the changes being made by the current amendment.  
Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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**Version with markings to show changes made**

**In the claims:**

Claims 2, 4, 7, 11, 15-20, 22, 26, 27, 29, 34-37, and 39 have been amended as follows:

2. A user identity authentication system according to claim 1, wherein **[comprising: a mobile information communication device; a liquid crystal display device provided in said mobile information communication device; and**

**an] the image sensor [provided in said liquid crystal display device and] is** constructed of photo diodes provided for respective pixels[,

**wherein said image sensor reads individual information of a user, and a user's identity is authenticated based on the individual information].**

4. A user identity authentication system according to claim 3, wherein **[comprising: a liquid crystal display device comprising a built-in image sensor; a storage device; and]** the module for comparing is configured **[a module]** for judging whether the user can be identified or not by comparing individual information read by said image sensor with individual information stored in said storage device.

7. A user identity authentication system according to claim 2, wherein said mobile information communication device comprises an operation key and is configured to provide an operation of authenticating the user's identity **[is performed]** by manipulating the **[an]** operation key **[of said mobile information communication device].**

11. A user identity authentication system according to claim 4, wherein said mobile information communication device comprises an operation key and is configured to provide an

operation of authenticating the user's identity **[is performed]** by manipulating the [an] operation key **[of said mobile information communication device]**.

15. A user identity authentication system according to claim 2, wherein said mobile information communication device comprises a power source and is configured to provide authentication of said user's identity **[is triggered]** simultaneously with [by] switching on the [a] power source of said mobile information communication device.

16. A user identity authentication system according to claim 4, wherein said mobile information communication device comprises a power source and is configured to provide authentication of said user's identity **[is triggered]** simultaneously with [by] switching on the [a] power source of said mobile information communication device.

17. A user identity authentication system according to claim 2, wherein one or both of a palm print (palm lines) and/or a fingerprint **[is used as]** comprises said individual information.

18. A user identity authentication system according to claim 4, wherein one or both of a palm print (palm lines) and/or a fingerprint **[is used as]** comprises said individual information.

19. A user identity authentication system according to claim 2, wherein said individual information comprises one or both of a palm print of a whole palm or a part of a palm **[is used]**.

20. A user identity authentication system according to claim 4, wherein said individual information comprises one or both of a palm print of a whole palm or a part of a palm **[is used]**.

22. A user identity authentication system of claim 21, wherein **[comprising:  
a mobile information communication device;**

**a liquid crystal display device provided in said mobile information communication device; and**

**an image sensor built into said liquid crystal display device,**

**wherein said image sensor reads individual information of a user, and]** said individual information is transmitted via the Internet only when necessary, in accordance with a transmission necessity judged based on a degree of requirement set in said mobile information communication device or a destination terminal of communication.

26. A user identity authentication method using a mobile information communication device provided with a liquid crystal display device comprising a built-in image sensor, said method comprising:

a step of reading individual information of a user with said image sensor; and  
a step of authenticating a user's identity based **[ons]** on said individual information.

27. A user identity authentication method according to claim 26 wherein the **[using a mobile information communication device provided with a liquid crystal display device provided in said mobile information communication device, and with an]** image sensor **[provided in said liquid crystal display device and constructed of]** comprises photo diodes provided for respective pixels[, said method comprising:

**a step of reading individual information of a user with said image sensor; and  
a step of authenticating a user's identity based on said individual information].**

29. A user identity authentication method according to claim 27, further comprising **[wherein an operation of]** authenticating the user's identity **[is performed]** by manipulating an operation key on said mobile information communication device.

34. A user identity authentication method according to claim 27, wherein one or both of a palm print (palm lines) and/or a fingerprint **[is used as]** comprises said individual information.

35. A user identity authentication method according to claim 27, wherein said individual information comprises one or both of a palm print of a whole palm or a part of a palm **[is used]**.

36. A user identity authentication method using a mobile information communication device provided with a liquid crystal display device comprising a built-in **[an]** image sensor, said method comprising:

- a step of reading individual information of a user with said image sensor; and
- a step of transmitting said individual information via the Internet.

37. A user identity authentication method according to claim 36 further comprising **[using a mobile information communication device provided with a liquid crystal display device comprising a built-in an image sensor, said method comprising:**

- a step of reading individual information of a user with said image sensor;**
- a step of judging whether or not said individual information needs to be transmitted in accordance with a degree of requirement set in said mobile information communication device or a destination terminal of communication; and
- [a step of]** transmitting said individual information via the Internet only when necessary.

39. A mobile telephonic device comprising:  
a liquid crystal display device; and  
a flash memory,  
wherein said liquid crystal device **[comprising]** comprises photo diodes provided for respective pixels, and  
wherein said flash memory is stored with individual information of a user.